



RECEIVED

JAN 31 2001

A003.txt

SEQUENCE LISTING

TECH CENTER 1600/2900

<110> Chicheportiche, Yves  
Browning, Jeffrey

<120> Tumor Necrosis Factor Related Ligand

<130> A003

<140> 09/245,198

<141> 1999-02-05

<150> 60/023,541

<151> 1996-08-07

<150> 60/028,515

<151> 1996-10-18

<150> 60/040,820

<151> 1997-03-18

<160> 27

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1168

<212> DNA

<213> homo sapien

<400> 1

ggtgctgagc	ctggggcctgg	cgctggcctg	ccttggcctc	ctgctgggtcg	tggtcagcct	60
ggggagctgg	gcaacgctgt	ctgcccagga	gccttctcag	gaggagctga	cagcagagga	120
ccgccgggag	ccccctgaac	tgaatcccca	gacagaggaa	agccaggatg	tggtaccttt	180
cttggaaaca	ctagtccggc	ctcgaagaag	tgctcctaaa	ggccggaagg	cgcggcctcg	240
ccgagctatt	gcagcccatt	atgaggttca	tcctcggcca	ggacaggatg	gagcacaagc	300
aggtgtggat	gggacagtga	gtggctggga	agagaccaa	atcaacagct	ccagccctct	360
gcgctacgac	cgccagattg	gggaattttac	agtcattcagg	gctgggctct	actacctgta	420
ctgtcaggtg	cactttgatg	agggaaaggc	tgtctacctg	aagctggact	tgctgggtgaa	480
cggtgtgctg	gccctgcgct	gcctggaaga	attctcagcc	acagcagcaa	gctctcctgg	540
gccccagctc	cgtttgtgcc	aggtgtctgg	gctgttgccg	ctgcggccag	ggtcttccct	600
tcggatccgc	accctccctc	gggctcatct	taaggctgcc	cccttcctaa	cctactttgg	660
actctttcaa	gttccactgag	gggccttgct	ctcccagatt	ccttaaactt	tccttggtct	720
caggagcatc	accacacctc	cctaccccac	cccactcct	ccacccctc	gctgctcctt	780
ggtccagtcc	tgtctctcct	caaaggcagc	cagagcttgt	tcacatgttt	ccattccaca	840
gacgtatcct	tgtctcttct	aacatcccat	cccaccacaa	ctatccacct	cactagctcc	900
caaagcccct	acttatccct	gactccccca	cccactcacc	cgaccacgtg	tttattgact	960
ttgtgcacca	ggcactgaga	tgggctggac	ctgggtggcag	gaagccagag	aacctgggac	1020
taggccagaa	gttcccaact	gtgaggggga	agagctgggg	acaagctcct	ccctggatcc	1080

## A003.txt

ctgtggattt tgaaaagata ctatTTTTat tattattgtg acaaaatgtt aaatggatat 1140  
 taaagagaat aaatcatgat ttctcttc 1168

<210> 2  
 <211> 225  
 <212> PRT  
 <213> homo sapien

<400> 2  
 Val Leu Ser Leu Gly Leu Ala Leu Ala Cys Leu Gly Leu Leu Leu Val  
 1 5 10 15  
 Val Val Ser Leu Gly Ser Trp Ala Thr Leu Ser Ala Gln Glu Pro Ser  
 20 25 30  
 Gln Glu Glu Leu Thr Ala Glu Asp Arg Arg Glu Pro Pro Glu Leu Asn  
 35 40 45  
 Pro Gln Thr Glu Glu Ser Gln Asp Val Val Pro Phe Leu Glu Gln Leu  
 50 55 60  
 Val Arg Pro Arg Arg Ser Ala Pro Lys Gly Arg Lys Ala Arg Pro Arg  
 65 70 75 80  
 Arg Ala Ile Ala Ala His Tyr Glu Val His Pro Arg Pro Gly Gln Asp  
 85 90 95  
 Gly Ala Gln Ala Gly Val Asp Gly Thr Val Ser Gly Trp Glu Glu Thr  
 100 105 110  
 Lys Ile Asn Ser Ser Ser Pro Leu Arg Tyr Asp Arg Gln Ile Gly Glu  
 115 120 125  
 Phe Thr Val Ile Arg Ala Gly Leu Tyr Tyr Leu Tyr Cys Gln Val His  
 130 135 140  
 Phe Asp Glu Gly Lys Ala Val Tyr Leu Lys Leu Asp Leu Leu Val Asn  
 145 150 155 160  
 Gly Val Leu Ala Leu Arg Cys Leu Glu Glu Phe Ser Ala Thr Ala Ala  
 165 170 175  
 Ser Ser Pro Gly Pro Gln Leu Arg Leu Cys Gln Val Ser Gly Leu Leu  
 180 185 190  
 Pro Leu Arg Pro Gly Ser Ser Leu Arg Ile Arg Thr Leu Pro Trp Ala  
 195 200 205  
 His Leu Lys Ala Ala Pro Phe Leu Thr Tyr Phe Gly Leu Phe Gln Val  
 210 215 220  
 His  
 225

<210> 3  
 <211> 1373  
 <212> DNA  
 <213> homo sapien

<400> 3  
 atgtcattgt tagactttga aatttccgcc cgccggctcc ccctcccccg atccctcggg 60  
 tcccgggatg ggggggcggt gaggcaggca cagcccccgc ccccatggc cgcccgtcgg 120  
 agccagaggc ggagggggcg ccggggggag ccgggcaccg ccctgctggt cccgctcgcg 180  
 ctgggcctgg gcctggcgct ggcctgcctc ggcctcctgc tggcgtggt cagtttgggg 240  
 agccgggcat cgctgtccgc ccaggagcct gccaggagg agctggtggc agaggaggac 300

## A003.txt

caggacccgt	cggaactgaa	tccccagaca	gaagaaagcc	aggatcctgc	gcctttcctg	360
aaccgactag	ttcggcctcg	cagaagtgca	cctaaaggcc	ggaaaacacg	ggctcgaaga	420
gcgatcgag	cccattatga	agttcatcca	cgacctggac	aggacggagc	gcaggcaggt	480
gtggacggga	cagtgagtgg	ctgggaggaa	gccagaatca	acagctccag	ccctctgcgc	540
tacaaccgcc	agatcgggga	gtttatagtc	acccgggctg	ggctctacta	cctgtactgt	600
caggtgcact	ttgatgaggg	gaaggctgtc	tacctgaagc	tggacttgct	ggtggatggt	660
gtgctggccc	tgcgctgcct	ggaggaattc	tcagccactg	cggccagttc	cctcgggccc	720
cagctccgcc	tctgccaggt	gtctgggctg	ttggccctgc	ggccagggtc	ctccctgcgg	780
atccgcaccc	tcccctgggc	ccatctcaag	gctgccccct	tcctcaccta	cttcggactc	840
ttccaggttc	actgaggggc	cctgggtctcc	ccacagtcgt	cccaggctgc	cggctccctc	900
cgacagctct	ctgggcaccc	ggtccccctc	gccccaccct	cagccgctct	ttgctccaga	960
cctgccccct	cctctagagg	ctgcctgggc	ctgttcacgt	gttttccatc	ccacataaat	1020
acagtattcc	cactcttata	ttacaactcc	cccaccgccc	actctccacc	tcactagctc	1080
cccaatccct	gaccctttga	ggccccccagt	gatctcgact	ccccctggc	cacagacccc	1140
cagggcattg	tgttcactgt	actctgtggg	caaggatggg	tccagaagac	cccacttcag	1200
gcactaagag	gggctggacc	tggcggcagg	aagccaaaga	gactgggcct	aggccaggag	1260
ttcccaaata	tgaggggcga	gaaacaagac	aagctcctcc	cttgagaatt	ccctgtggat	1320
ttttaaaaca	gatattat	ttattattat	tgtgacaaaa	tgttgataaa	tgg	1373

&lt;210&gt; 4

&lt;211&gt; 284

&lt;212&gt; PRT

&lt;213&gt; homo sapien

&lt;400&gt; 4

Met	Ser	Leu	Leu	Asp	Phe	Glu	Ile	Ser	Ala	Arg	Arg	Leu	Pro	Leu	Pro
1				5					10					15	
Arg	Ser	Leu	Gly	Ser	Arg	Asp	Gly	Gly	Ala	Val	Arg	Gln	Ala	Gln	Pro
		20						25					30		
Pro	Ala	Pro	Met	Ala	Ala	Arg	Arg	Ser	Gln	Arg	Arg	Arg	Gly	Arg	Arg
		35						40					45		
Gly	Glu	Pro	Gly	Thr	Ala	Leu	Leu	Val	Pro	Leu	Ala	Leu	Gly	Leu	Gly
	50					55					60				
Leu	Ala	Leu	Ala	Cys	Leu	Gly	Leu	Leu	Leu	Ala	Val	Val	Ser	Leu	Gly
65					70					75				80	
Ser	Arg	Ala	Ser	Leu	Ser	Ala	Gln	Glu	Pro	Ala	Gln	Glu	Glu	Leu	Val
				85					90					95	
Ala	Glu	Glu	Asp	Gln	Asp	Pro	Ser	Glu	Leu	Asn	Pro	Gln	Thr	Glu	Glu
			100					105					110		
Ser	Gln	Asp	Pro	Ala	Pro	Phe	Leu	Asn	Arg	Leu	Val	Arg	Pro	Arg	Arg
	115						120					125			
Ser	Ala	Pro	Lys	Gly	Arg	Lys	Thr	Arg	Ala	Arg	Arg	Ala	Ile	Ala	Ala
	130					135					140				
His	Tyr	Glu	Val	His	Pro	Arg	Pro	Gly	Gln	Asp	Gly	Ala	Gln	Ala	Gly
145					150					155					160
Val	Asp	Gly	Thr	Val	Ser	Gly	Trp	Glu	Glu	Ala	Arg	Ile	Asn	Ser	Ser
				165					170					175	
Ser	Pro	Leu	Arg	Tyr	Asn	Arg	Gln	Ile	Gly	Glu	Phe	Ile	Val	Thr	Arg
			180					185					190		
Ala	Gly	Leu	Tyr	Tyr	Leu	Tyr	Cys	Gln	Val	His	Phe	Asp	Glu	Gly	Lys
		195					200						205		

## A003.txt

Ala	Val	Tyr	Leu	Lys	Leu	Asp	Leu	Leu	Val	Asp	Gly	Val	Leu	Ala	Leu
210						215					220				
Arg	Cys	Leu	Glu	Glu	Phe	Ser	Ala	Thr	Ala	Ala	Ser	Ser	Leu	Gly	Pro
225					230					235					240
Gln	Leu	Arg	Leu	Cys	Gln	Val	Ser	Gly	Leu	Leu	Ala	Leu	Arg	Pro	Gly
				245					250					255	
Ser	Ser	Leu	Arg	Ile	Arg	Thr	Leu	Pro	Trp	Ala	His	Leu	Lys	Ala	Ala
			260					265					270		
Pro	Phe	Leu	Thr	Tyr	Phe	Gly	Leu	Phe	Gln	Val	His				
		275					280								

&lt;210&gt; 5

&lt;211&gt; 18

&lt;212&gt; DNA

&lt;213&gt; homo sapien

&lt;400&gt; 5

gttccaggcc agcctggg

18

&lt;210&gt; 6

&lt;211&gt; 6

&lt;212&gt; DNA

&lt;213&gt; homo sapien

&lt;400&gt; 6

aataaa

6

&lt;210&gt; 7

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; homo sapien

&lt;400&gt; 7

ccctgcgctg cctggaggaa

20

&lt;210&gt; 8

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; homo sapien

&lt;400&gt; 8

tgatgagggg aaggctgtct

20

&lt;210&gt; 9

&lt;211&gt; 20

&lt;212&gt; DNA

&lt;213&gt; homo sapien

&lt;400&gt; 9

agaccagggc ccctcagtga

20

<210> 10  
 <211> 18  
 <212> DNA  
 <213> homo sapien  
  
 <400> 10  
 gttccaggcc agcctggg 18  
  
 <210> 11  
 <211> 20  
 <212> DNA  
 <213> homo sapien  
  
 <400> 11  
 tcaggtgcac tttgatgagg 20  
  
 <210> 12  
 <211> 18  
 <212> DNA  
 <213> homo sapien  
  
 <400> 12  
 ctgtcagctc ctcttgag 18  
  
 <210> 13  
 <211> 20  
 <212> DNA  
 <213> homo sapien  
  
 <400> 13  
 agcaggagcc ttctcaggag 20  
  
 <210> 14  
 <211> 21  
 <212> DNA  
 <213> homo sapien  
  
 <400> 14  
 gatccaggga ggagcttgtc c 21  
  
 <210> 15  
 <211> 20  
 <212> DNA  
 <213> homo sapien  
  
 <400> 15  
 ccctgcgctg cctggaggaa 20  
  
 <210> 16  
 <211> 20  
 <212> DNA

<213> homo sapien

<400> 16

agaccagggc ccctcagtga

20

<210> 17

<211> 21

<212> DNA

<213> homo sapien

<400> 17

agtcgtccca ggctgccggc t

21

<210> 18

<211> 21

<212> DNA

<213> homo sapien

<400> 18

cctgaagtgg ggtcttctgg a

21

<210> 19

<211> 231

<212> PRT

<213> homo sapien

<400> 19

Met	Ser	Thr	Glu	Ser	Met	Ile	Arg	Asp	Val	Glu	Leu	Ala	Glu	Glu	Ala
1				5					10					15	
Leu	Pro	Lys	Lys	Thr	Gly	Gly	Pro	Gln	Gly	Ser	Arg	Arg	Cys	Leu	Phe
			20					25					30		
Leu	Ser	Leu	Phe	Ser	Phe	Leu	Ile	Val	Ala	Gly	Ala	Thr	Thr	Leu	Phe
		35				40						45			
Cys	Leu	Leu	His	Phe	Gly	Val	Ile	Gly	Pro	Gln	Arg	Glu	Glu	Phe	Pro
	50					55					60				
Arg	Asp	Leu	Ser	Leu	Ile	Ser	Ser	Pro	Leu	Ala	Gln	Ala	Val	Arg	Ser
65					70					75					80
Ser	Ser	Arg	Thr	Pro	Ser	Asp	Lys	Pro	Val	Ala	His	Val	Val	Ala	Asn
				85					90					95	
Pro	Gln	Ala	Glu	Gly	Gln	Leu	Gln	Trp	Leu	Asn	Arg	Arg	Ala	Asn	Ala
			100					105					110		
Leu	Leu	Ala	Asn	Gly	Val	Glu	Leu	Arg	Asp	Asn	Gln	Leu	Val	Val	Pro
		115					120					125			
Ser	Glu	Gly	Leu	Ile	Tyr	Ser	Gln	Val	Leu	Phe	Gly	Gln	Gly	Cys	Pro
	130					135					140				
Ser	Thr	His	Val	Leu	Leu	Thr	His	Thr	Ile	Ser	Arg	Ile	Ala	Val	Ser
145					150					155					160
Tyr	Gln	Thr	Lys	Val	Asn	Leu	Leu	Ser	Ala	Ile	Lys	Ser	Pro	Cys	Gln
				165					170					175	
Arg	Glu	Thr	Pro	Glu	Gly	Ala	Glu	Ala	Lys	Pro	Trp	Tyr	Glu	Pro	Ile
			180					185					190		

A003.txt

Tyr	Leu	Gly	Gly	Val	Phe	Gln	Leu	Glu	Lys	Gly	Asp	Arg	Leu	Ser	Ala
		195					200					205			
Glu	Ile	Asn	Arg	Pro	Asp	Tyr	Leu	Asp	Phe	Ala	Glu	Ser	Gly	Gln	Val
	210					215					220				
Tyr	Phe	Gly	Ile	Ile	Ala	Leu									
225					230										

<210> 20  
 <211> 206  
 <212> PRT  
 <213> homo sapien

Met	Thr	Pro	Pro	Glu	Arg	Leu	Phe	Leu	Pro	Arg	Val	Cys	Phe	Thr	Thr
1				5					10					15	
Leu	His	Leu	Leu	Leu	Leu	Gly	Leu	Leu	Leu	Val	Leu	Leu	Pro	Gly	Ala
			20					25					30		
Gln	Gly	Leu	Pro	Gly	Val	Gly	Leu	Thr	Pro	Ser	Ala	Ala	Gln	Thr	Ala
		35					40					45			
Arg	Gln	His	Pro	Lys	Met	His	Leu	Ala	His	Thr	Leu	Lys	Pro	Ala	Ala
	50					55					60				
His	Leu	Ile	Gly	Asp	Pro	Ser	Lys	Gln	Asn	Ser	Leu	Leu	Trp	Arg	Ala
65					70					75					80
Asn	Thr	Asp	Arg	Ala	Phe	Leu	Gln	Asp	Gly	Phe	Ser	Leu	Ser	Asn	Asn
				85					90					95	
Ser	Leu	Leu	Val	Pro	Thr	Ser	Gly	Ile	Tyr	Phe	Val	Tyr	Asn	Ser	Gln
			100					105					110		
Val	Val	Phe	Ser	Gly	Lys	Ala	Tyr	Ser	Pro	Lys	Ala	Thr	Ser	Ser	Pro
		115					120					125			
Leu	Tyr	Leu	Ala	His	Glu	Val	Gln	Leu	Phe	Ser	Ser	Gln	Tyr	Pro	Phe
	130					135					140				
His	Val	Pro	Leu	Leu	Ser	Gln	Lys	Asn	Val	Tyr	Pro	Gly	Leu	Gln	
145					150				155						160
Glu	Pro	Trp	Leu	His	Ser	Met	Tyr	His	Gly	Ala	Ala	Phe	Gln	Leu	Thr
				165					170					175	
Gln	Gly	Asp	Gln	Leu	Ser	Thr	His	Thr	Asp	Gly	Ile	Gly	Pro	His	Leu
			180					185					190		
Val	Leu	Ser	Pro	Ser	Thr	Val	Phe	Gly	Ala	Phe	Ala	Leu			
		195					200				205				

<210> 21  
 <211> 243  
 <212> PRT  
 <213> homo sapien

Met	Gly	Ala	Leu	Gly	Leu	Glu	Gly	Arg	Gly	Gly	Arg	Leu	Gln	Gly	Arg
1				5					10					15	
Gly	Ser	Leu	Leu	Leu	Ala	Val	Ala	Gly	Ala	Thr	Ser	Leu	Val	Thr	Leu
			20					25					30		
Leu	Leu	Ala	Val	Pro	Ile	Thr	Val	Leu	Ala	Val	Leu	Ala	Leu	Val	Pro

## A003.txt

		35				40			45							
Gln	Asp	Gln	Gly	Gly	Leu	Val	Thr	Glu	Thr	Ala	Asp	Pro	Gly	Ala	Gln	
	50					55					60					
Ala	Gln	Gln	Gly	Leu	Gly	Phe	Gln	Lys	Leu	Pro	Glu	Glu	Glu	Pro	Glu	
65					70					75					80	
Thr	Asp	Leu	Ser	Pro	Gly	Leu	Pro	Ala	Ala	His	Leu	Ile	Gly	Ala	Pro	
				85					90					95		
Leu	Lys	Gly	Gln	Gly	Leu	Gly	Trp	Glu	Thr	Thr	Lys	Glu	Gln	Ala	Phe	
			100					105					110			
Leu	Thr	Ser	Gly	Thr	Gln	Phe	Ser	Asp	Ala	Glu	Gly	Leu	Ala	Leu	Pro	
		115					120					125				
Gln	Asp	Gly	Tyr	Leu	Tyr	Thr	Cys	Leu	Val	Gly	Tyr	Arg	Gly	Arg	Ala	
	130					135					140					
Pro	Pro	Gly	Gly	Gly	Asp	Pro	Gln	Gly	Arg	Ser	Val	Thr	Leu	Arg	Ser	
145					150					155					160	
Ser	Leu	Tyr	Arg	Ala	Gly	Gly	Ala	Tyr	Gly	Pro	Gly	Thr	Pro	Glu	Leu	
				165					170					175		
Leu	Leu	Glu	Gly	Ala	Glu	Thr	Val	Thr	Pro	Val	Leu	Asp	Pro	Ala	Arg	
			180					185					190			
Arg	Gln	Gly	Tyr	Gly	Pro	Leu	Trp	Tyr	Thr	Ser	Val	Gly	Phe	Gly	Gly	
		195					200					205				
Leu	Val	Gln	Leu	Arg	Arg	Gly	Glu	Arg	Val	Tyr	Val	Asn	Ile	Ser	His	
	210					215					220					
Pro	Asp	Met	Val	Asp	Phe	Ala	Thr	Gly	Lys	Thr	Phe	Phe	Gly	Ala	Val	
225					230					235					240	
Met	Val	Gly														

<210> 22  
 <211> 238  
 <212> PRT  
 <213> homo sapien

<400> 22  
 Ala Pro Pro Gly Thr Val Leu Pro Cys Pro Thr Ser Val Pro Arg Arg  
 1 5 10 15  
 Pro Gly Gln Arg Pro Pro Pro Pro Pro Pro Pro Pro Leu Pro  
 20 25 30  
 Pro Pro Pro Pro Pro Pro Pro Leu Pro Leu Pro Pro Pro Leu  
 35 40 45  
 Lys Lys Arg Gly Asn His Ser Thr Gly Leu Cys Leu Leu Val Met Phe  
 50 55 60  
 Phe Met Val Leu Val Val Gly Leu Gly Leu Gly Leu Gly Met Phe Gln  
 65 70 75 80  
 Leu Phe His Leu Gln Lys Glu Leu Ala Glu Leu Arg Glu Ser Thr Ser  
 85 90 95  
 Gln Met His Thr Ala Ser Ser Leu Glu Lys Gln Ile Gly His Pro Ser  
 100 105 110  
 Pro Pro Pro Glu Lys Lys Glu Leu Phe Lys Val Ala His Leu Thr Gly  
 115 120 125  
 Lys Ser Asn Ser Arg Ser Met Pro Leu Glu Trp Glu Asp Thr Tyr Gly



## A003.txt

130		135		140
Ile Val Leu Leu Ser Gly	Val Lys Tyr Lys Lys Gly Gly Leu Val Ile			
145		150		155
Asn Glu Thr Gly Phe Val Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser				160
		165		170
Cys Asn Asn Gln Pro Leu Ser Lys Val Tyr Met Arg Asn Ser Lys Tyr				175
		180		185
Pro Gln Asp Leu Val Met Met Gly Lys Asn Met Ser Tyr Cys Thr Thr				190
		195		200
Gly Gln Met Trp Ala Arg Ser Ser Tyr Leu Gly Ala Val Phe Asn Leu				205
		210		215
Thr Ser Ala Asp His Lys Tyr Val Asn Val Ser Glu Lys Leu				220
225		230		235

&lt;210&gt; 23

&lt;211&gt; 283

&lt;212&gt; PRT

&lt;213&gt; homo sapien

&lt;400&gt; 23

Met Ala Met Met Glu Val Gln Gly Gly Pro Ser Leu Gly Gln Thr Cys	
1	5
Val Leu Ile Val Ile Phe Thr Val Leu Leu Gln Ser Leu Cys Val Ala	
	20
Val Thr Tyr Val Tyr Phe Thr Asn Glu Leu Lys Gln Met Gln Asp Lys	
	35
Tyr Ser Lys Ser Gly Ile Ala Cys Phe Leu Lys Glu Asp Asp Ser Tyr	
50	55
Trp Asp Pro Asn Asp Glu Glu Ser Met Asn Ser Pro Cys Trp Gln Val	
65	70
Lys Trp Gln Val Lys Trp Gln Leu Arg Gln Leu Val Arg Lys Met Ile	
	85
Leu Arg Thr Ser Glu Glu Thr Ile Ser Thr Val Gln Glu Lys Gln Gln	
	100
Asn Ile Ser Pro Leu Val Arg Glu Arg Gly Pro Gln Arg Val Ala Ala	
	115
His Ile Thr Gly Thr Arg Gly Arg Ser Asn Thr Leu Ser Ser Pro Asn	
	130
Ser Lys Asn Glu Lys Ala Leu Gly Arg Lys Ile Asn Ser Trp Glu Ser	
145	150
Ser Arg Ser Gly His Ser Phe Leu Ser Asn Leu His Leu Arg Asn Gly	
	165
Glu Leu Val Ile His Glu Lys Gly Phe Tyr Tyr Ile Tyr Ser Gln Thr	
	180
Tyr Phe Arg Phe Gln Glu Glu Ile Lys Glu Asn Thr Lys Asn Asp Lys	
	195
Gln Met Val Val Tyr Ile Tyr Lys Tyr Thr Ser Tyr Pro Asp Pro Ile	
	210
Leu Leu Met Lys Ser Ala Arg Asn Ser Cys Trp Ser Lys Asp Ala Glu	
225	230
Tyr Gly Ser Ile Tyr Gln Gly Gly Ile Phe Glu Leu Lys Glu Asn Asp	
	235

## A003.txt

				245					250					255		
Arg	Ile	Phe	Val	Ser	Val	Thr	Asn	Glu	His	Leu	Ile	Asp	Met	Asp	His	
			260						265				270			
Glu	Ala	Ser	Phe	Phe	Gly	Ala	Phe	Leu	Val	Gly						
			275						280							

<210> 24  
 <211> 191  
 <212> PRT  
 <213> homo sapien

<400> 24																
Met	Pro	Glu	Glu	Gly	Ser	Gly	Cys	Ser	Val	Arg	Arg	Arg	Pro	Tyr	Gly	
1				5					10					15		
Cys	Val	Leu	Arg	Ala	Ala	Leu	Val	Pro	Leu	Val	Ala	Gly	Leu	Val	Ile	
			20					25					30			
Cys	Leu	Val	Val	Cys	Ile	Gln	Arg	Phe	Ala	Gln	Ala	Gln	Gln	Gln	Leu	
		35				40						45				
Pro	Leu	Glu	Ser	Leu	Gly	Trp	Asp	Val	Ala	Glu	Leu	Gln	Leu	Asn	His	
	50					55					60					
Thr	Gly	Pro	Gln	Gln	Asp	Pro	Arg	Leu	Tyr	Trp	Gln	Gly	Gly	Pro	Ala	
65					70					75					80	
Leu	Gly	Arg	Ser	Phe	Leu	His	Gly	Pro	Glu	Leu	Asp	Lys	Gly	Gln	Leu	
				85					90					95		
Arg	Ile	His	Arg	Asp	Gly	Ile	Tyr	Met	Val	His	Ile	Gln	Val	Thr	Leu	
			100					105					110			
Ala	Ile	Cys	Ser	Ser	Thr	Thr	Ala	Ser	Arg	His	His	Pro	Thr	Thr	Leu	
		115					120					125				
Ala	Val	Gly	Ile	Cys	Ser	Pro	Ala	Ser	Arg	Ser	Ile	Ser	Leu	Leu	Arg	
	130					135					140					
Leu	Ser	Phe	His	Gln	Gly	Cys	Thr	Ile	Val	Ser	Gln	Arg	Leu	Thr	Pro	
145					150					155					160	
Leu	Arg	Asp	Thr	Leu	Cys	Thr	Asn	Leu	Thr	Gly	Thr	Leu	Leu	Pro	Ser	
				165				170						175		
Arg	Asn	Thr	Asp	Glu	Thr	Phe	Phe	Gly	Val	Gln	Trp	Val	Arg	Pro		
			180					185					190			

<210> 25  
 <211> 229  
 <212> PRT  
 <213> homo sapien

<400> 25																
Met	Asp	Pro	Gly	Leu	Gln	Gln	Ala	Leu	Asn	Gly	Met	Ala	Pro	Pro	Gly	
1				5					10					15		
Asp	Thr	Ala	Met	His	Val	Pro	Ala	Gly	Ser	Val	Ala	Ser	His	Leu	Gly	
		20						25					30			
Thr	Thr	Ser	Arg	Ser	Tyr	Phe	Tyr	Leu	Thr	Thr	Ala	Thr	Leu	Ala	Leu	
		35				40						45				
Cys	Leu	Val	Phe	Thr	Val	Ala	Thr	Ile	Met	Val	Leu	Val	Val	Gln	Arg	
	50					55					60					

## A003.txt

Thr	Asp	Ser	Ile	Pro	Asn	Ser	Pro	Asp	Asn	Val	Pro	Leu	Lys	Gly	Gly
65					70					75					80
Asn	Cys	Ser	Glu	Asp	Leu	Leu	Cys	Ile	Leu	Lys	Arg	Ala	Pro	Phe	Lys
				85						90				95	
Ser	Trp	Ala	Tyr	Leu	Gln	Val	Ala	Lys	His	Leu	Asn	Lys	Thr	Lys	Leu
			100					105					110		
Ser	Trp	Asn	Lys	Asp	Gly	Ile	Leu	His	Gly	Val	Arg	Tyr	Gln	Asp	Gly
		115					120					125			
Asn	Leu	Val	Ile	Gln	Phe	Pro	Gly	Phe	Ile	Ile	Cys	Gln	Leu	Gln	Phe
		130				135					140				
Leu	Val	Gln	Cys	Pro	Asn	Asn	Ser	Val	Asp	Leu	Lys	Leu	Glu	Leu	Leu
145					150					155					160
Ile	Asn	Lys	His	Ile	Lys	Lys	Gln	Ala	Leu	Val	Thr	Val	Cys	Glu	Ser
				165						170				175	
Gly	Met	Gln	Thr	Lys	His	Val	Tyr	Gln	Asn	Leu	Ser	Gln	Phe	Leu	Leu
			180					185					190		
Asp	Tyr	Leu	Gln	Val	Asn	Thr	Thr	Ile	Ser	Val	Asn	Val	Asp	Thr	Phe
		195					200					205			
Gln	Tyr	Ile	Asp	Thr	Ser	Thr	Phe	Pro	Leu	Glu	Asn	Val	Leu	Ser	Ile
		210				215					220				
Phe	Lys	Asn	Ser	Asp											
225															

&lt;210&gt; 26

&lt;211&gt; 257

&lt;212&gt; PRT

&lt;213&gt; homo sapien

&lt;400&gt; 26

Met	Ile	Glu	Thr	Tyr	Asn	Gln	Thr	Ser	Pro	Arg	Ser	Ala	Ala	Thr	Gly
1				5					10					15	
Leu	Pro	Ile	Ser	Met	Lys	Ile	Phe	Met	Tyr	Leu	Leu	Thr	Val	Phe	Leu
			20					25					30		
Ile	Thr	Met	Ile	Gly	Ser	Ala	Leu	Phe	Ala	Val	Tyr	Leu	His	Arg	Arg
		35					40					45			
Leu	Asp	Lys	Ile	Glu	Asp	Glu	Arg	Asn	Leu	His	Glu	Asp	Phe	Val	Phe
	50				55						60				
Met	Lys	Thr	Ile	Gln	Arg	Cys	Asn	Thr	Gly	Glu	Arg	Ser	Leu	Ser	Leu
65					70					75					80
Leu	Asn	Cys	Glu	Glu	Ile	Lys	Ser	Gln	Phe	Glu	Gly	Phe	Val	Asp	Ile
			85						90					95	
Met	Leu	Asn	Lys	Glu	Glu	Thr	Lys	Lys	Glu	Asn	Ser	Phe	Glu	Met	Gln
			100					105					110		
Lys	Gly	Asp	Gln	Asn	Pro	Gln	Ile	Ala	Ala	His	Val	Ile	Ser	Glu	Ala
		115				120						125			
Ser	Ser	Lys	Thr	Thr	Ser	Val	Leu	Gln	Trp	Ala	Glu	Lys	Gly	Tyr	Tyr
		130				135					140				
Thr	Met	Ser	Asn	Asn	Leu	Val	Thr	Leu	Glu	Asn	Gly	Lys	Gln	Leu	Thr
145					150					155					160
Val	Lys	Arg	Gln	Gly	Tyr	Ile	Tyr	Ala	Gln	Val	Thr	Phe	Cys	Ser	Asn
				165					170					175	

## A003.txt

Arg Glu Ala Ser Ser Gln Ala Pro Phe Ile Ala Ser Leu Cys Leu Lys  
                   180                  185                  190  
 Ser Pro Gly Arg Phe Glu Arg Ile Leu Leu Arg Ala Ala Asn Thr His  
                   195                  200                  205  
 Ser Ser Ala Lys Pro Cys Gly Gln Gln Ser Ile His Leu Gly Gly Val  
                   210                  215                  220  
 Phe Glu Leu Gln Pro Gly Ala Ser Val Phe Val Asn Val Thr Asp Pro  
 225                  230                  235                  240  
 Ser Gln Val Ser His Gly Thr Gly Phe Thr Ser Phe Gly Leu Leu Lys  
                   245                  250                  255  
 Leu

&lt;210&gt; 27

&lt;211&gt; 253

&lt;212&gt; PRT

&lt;213&gt; homo sapien

&lt;400&gt; 27

Met Glu Tyr Ala Ser Asp Ala Ser Leu Asp Pro Glu Ala Pro Trp Pro  
   1                  5                  10                  15  
 Pro Ala Pro Arg Ala Arg Ala Cys Arg Val Leu Pro Trp Ala Leu Val  
                   20                  25                  30  
 Ala Gly Leu Leu Leu Leu Ala Ala Ala Cys Val Pro Ala Val Phe  
                   35                  40                  45  
 Leu Ala Cys Pro Trp Ala Val Ser Gly Ala Arg Ala Ser Pro Ser Gly  
   50                  55                  60  
 Ser Ala Ala Ser Pro Arg Leu Arg Glu Gly Pro Glu Leu Ser Pro Asp  
 65                  70                  75                  80  
 Asp Pro Ala Gly Leu Leu Asp Leu Arg Gln Gly Met Phe Ala Gln Leu  
                   85                  90                  95  
 Val Ala Gln Asn Val Leu Leu Ile Asp Gly Pro Leu Ser Trp Tyr Ser  
                   100                  105                  110  
 Asp Asp Gly Ala Gly Ser Ser Tyr Leu Ser Gln Gly Leu Arg Tyr Glu  
                   115                  120                  125  
 Glu Asp Lys Lys Glu Leu Val Val Asp Ser Pro Gly Leu Tyr Tyr Val  
                   130                  135                  140  
 Phe Leu Glu Leu Lys Leu Ser Pro Thr Phe Thr Asn Thr Gly His Lys  
 145                  150                  155                  160  
 Val Gln Gly Trp Val Ser Leu Val Leu Gln Ala Lys Pro Gln Val Asp  
                   165                  170                  175  
 Asp Phe Asp Asn Leu Ala Leu Thr Val Glu Leu Phe Pro Cys Ser Met  
                   180                  185                  190  
 Glu Asn Lys Leu Val Asp Arg Ser Trp Ser Gln Leu Leu Leu Lys  
                   195                  200                  205  
 Ala Gly His Arg Leu Ser Val Gly Leu Arg Ala Tyr Leu His Gly Ala  
                   210                  215                  220  
 Gln Asp Ala Tyr Arg Asp Trp Glu Leu Ser Tyr Pro Asn Thr Thr Ser  
 225                  230                  235                  240  
 Phe Gly Leu Phe Leu Val Lys Pro Asp Asn Pro Trp Glu  
                   245                  250